

A work project, presented as part of the requirements for the Award of a Master's degree in
Management from the Nova School of Business and Economics

**From global efficiency to local self-sufficiency - The challenges & developments of
globalization on the food industry dynamics**

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Abstract

From global efficiency to local self-sufficiency - The challenges & developments of globalization on the food industry dynamics. The food industry presents a growing fragmented market which are adapting to consumer shifts and continuously changing industry dynamics - to be resilient and relevant. The industry contains of supply chain actors both contributing to ecological and social challenges, including food waste, climate change and health diseases. Conscious consumer shifts drive the development towards self-sufficiency, with players taking actions both in formal organizational commitments and in terms of the marketing P's: unique sustainable products, home-delivery, reusable plastic and organic production.

Keywords:

Change

Globalization

Self-sufficiency

Developments

Food industry

Behaviour

Supply chain

Ecological

Sustainability

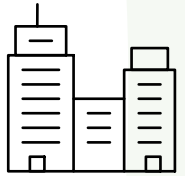
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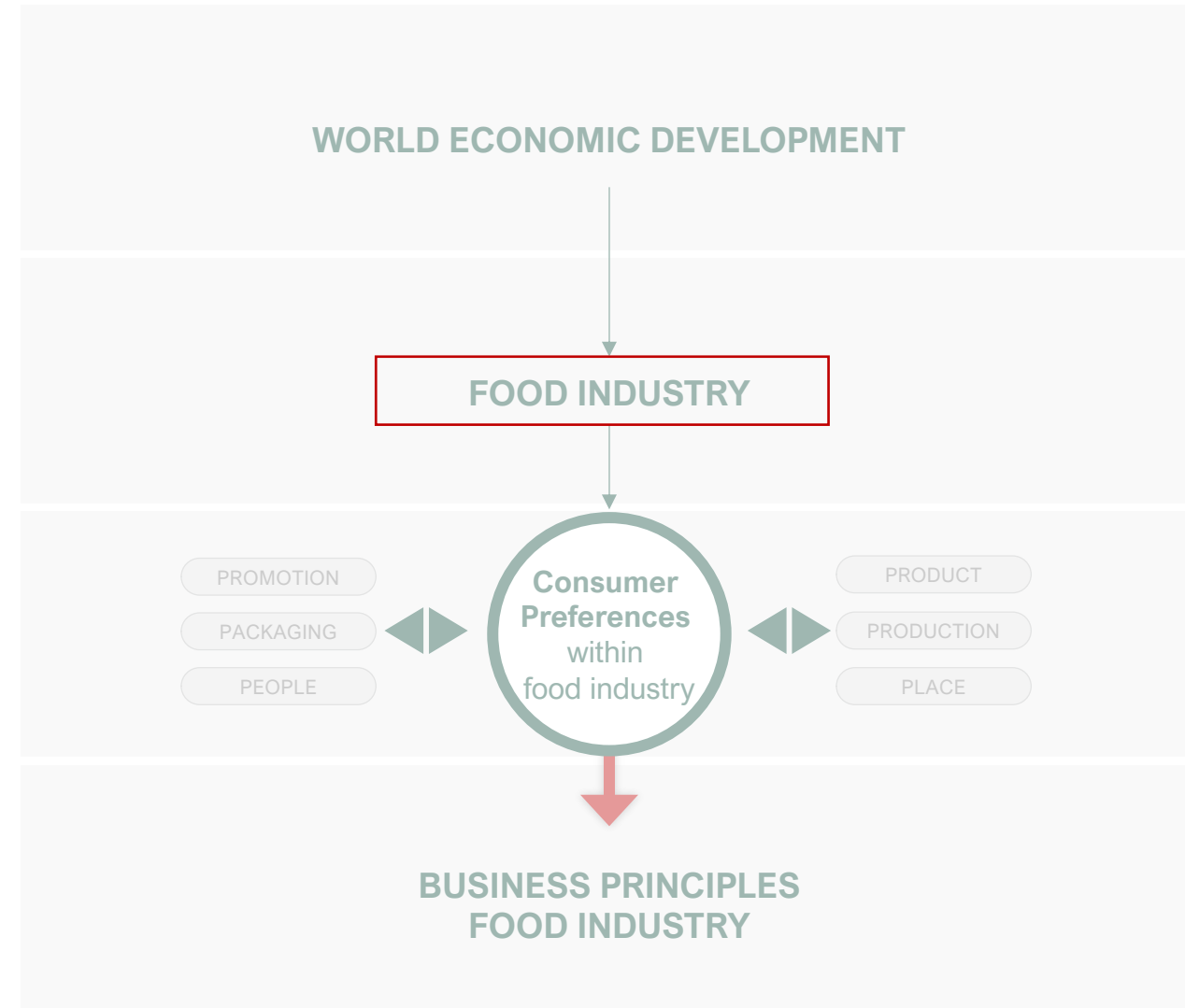
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Current food industry dynamics

Two-sided market perspective – supply and demand side

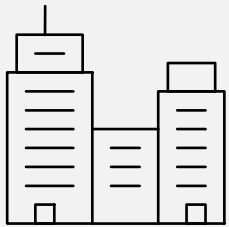


World economic development

Food Industry dynamics

Analysis of consumer trends

Recommendations on trend adaption



Current food
industry dynamics

2. What is the current situation of the food industry

2.1 Food industry overview

- 2.1.1 How is the food industry defined?
- 2.1.2 What do key performance indicators show?

2.2 Two-sided market perspective

- 2.2.1 Who is part of the supply side in the food market and what does the supply side offer?
- 2.2.2 Who is part of the demand side and what is demanded?

2.3 Food industry development

- 2.3.1 What are the industry's developments and limitations?
- 2.3.2 How is the industry reaction? (first sense that things are evolving)
- 2.3.3 What are the emerging future trends and requirements in the food industry?

2.1 FOOD INDUSTRY

Overview

References: (Food Service 2020)

Food industry overview

Two-sided market perspective

Food industry development



Food industry presents to be a growing market shaping new normal

Food industry is largely globalized and is defined by certain key figures

“Food industry includes all aspects of food production and sale, including raising of crops and livestock, manufacture, food processing, packaging and labelling, storage and distribution”¹

\$10 tn

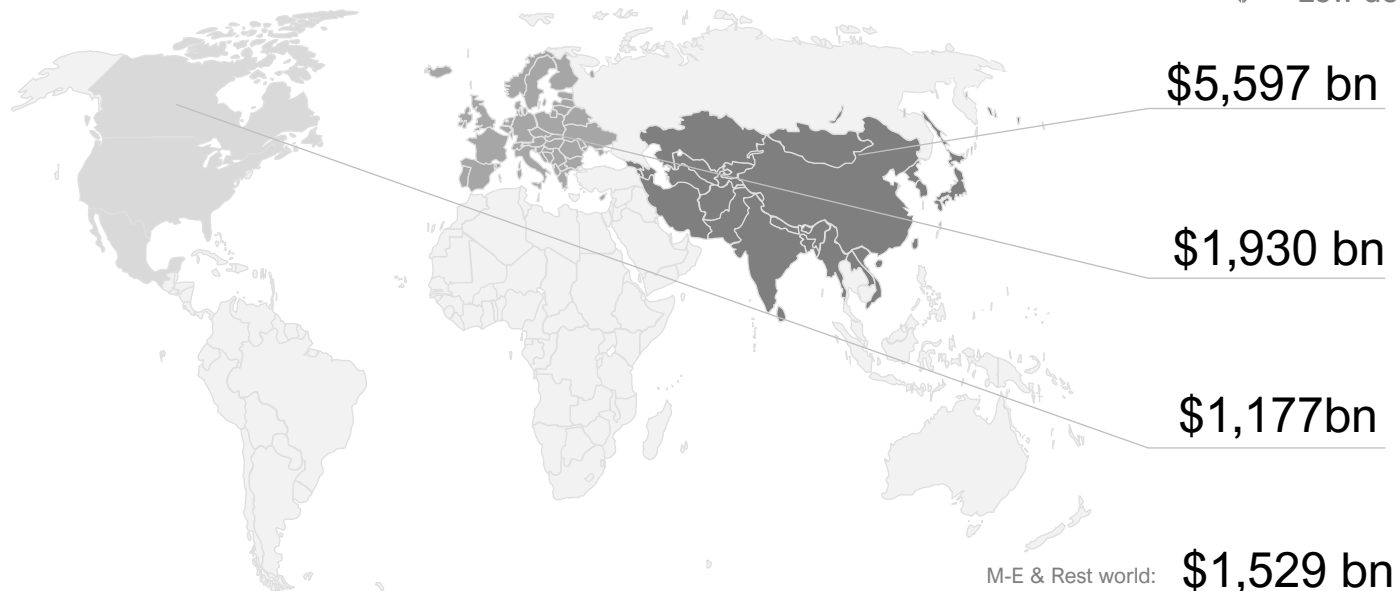
REVENUE

0,3%

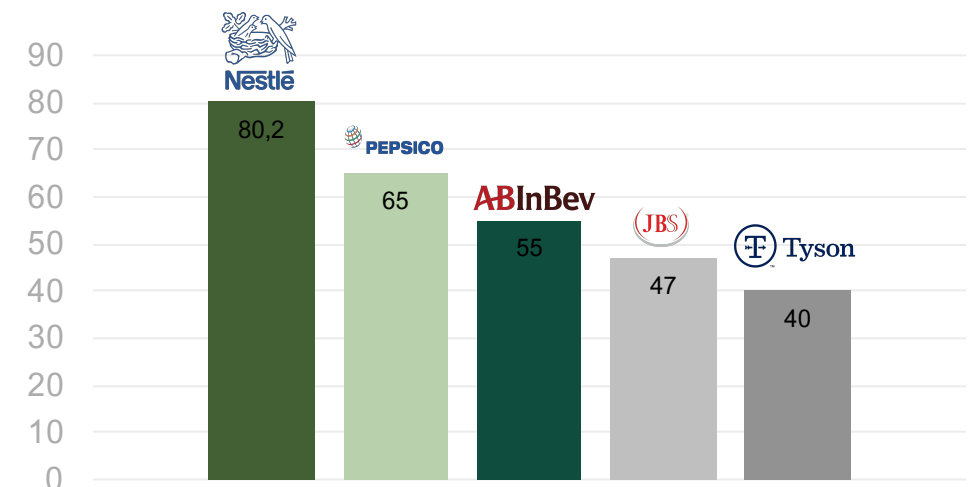
MARKET GROWTH

Characteristics of the industry

- Is highly sensitive to consumer shifts, trends and demand²
- Major player's global market share ranging from 0,5% - 0,8%¹
- Low degree of differentiation¹
- Competing on small margins & adopting to changing environment¹
- Market forecast to decelerate to 0,5% from 0,8% CAGR¹
- Asiapacific is biggest market (54,8%)¹



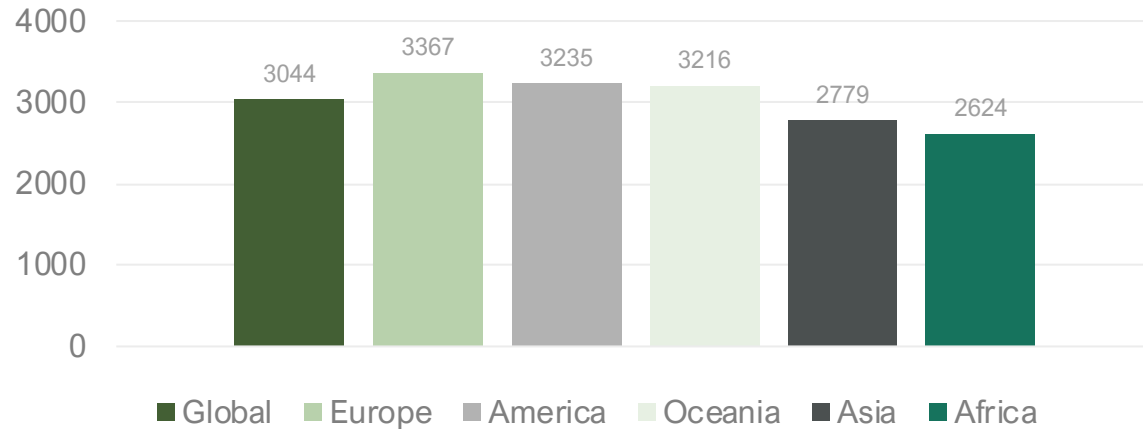
Key players & Food sales (in bn USD, 2019)



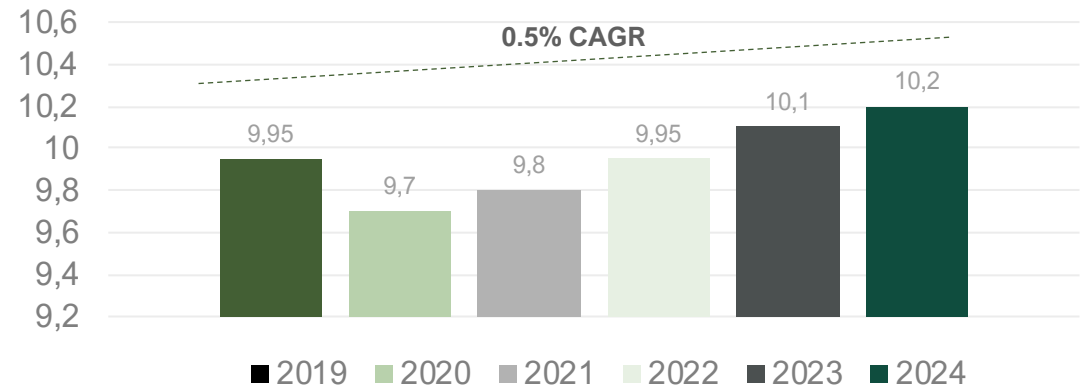
Food industry experiencing forces driving performance, regional shift & preferences

Key performance indicators of the industry

Geographical average kcal/capita/day (food balance)



Market value forecast 2019-2024 (in bn USD)



Food consumption reveals two major tendencies:



Increasing consumption from emerging countries due to income growth (high value products e.g., meat and dairy products)¹



Rising awareness and concerns in developed world led to **lower consumption**¹

Food industry is forecasting to increase over next four years



Due to the global pandemic happening in 2020, the food industry has been **minorly** impacted with a **decrease of 0,25%**²



The level of market value will reach **10,2 by 2024** proving a **0,5% CAGR** since 2019²

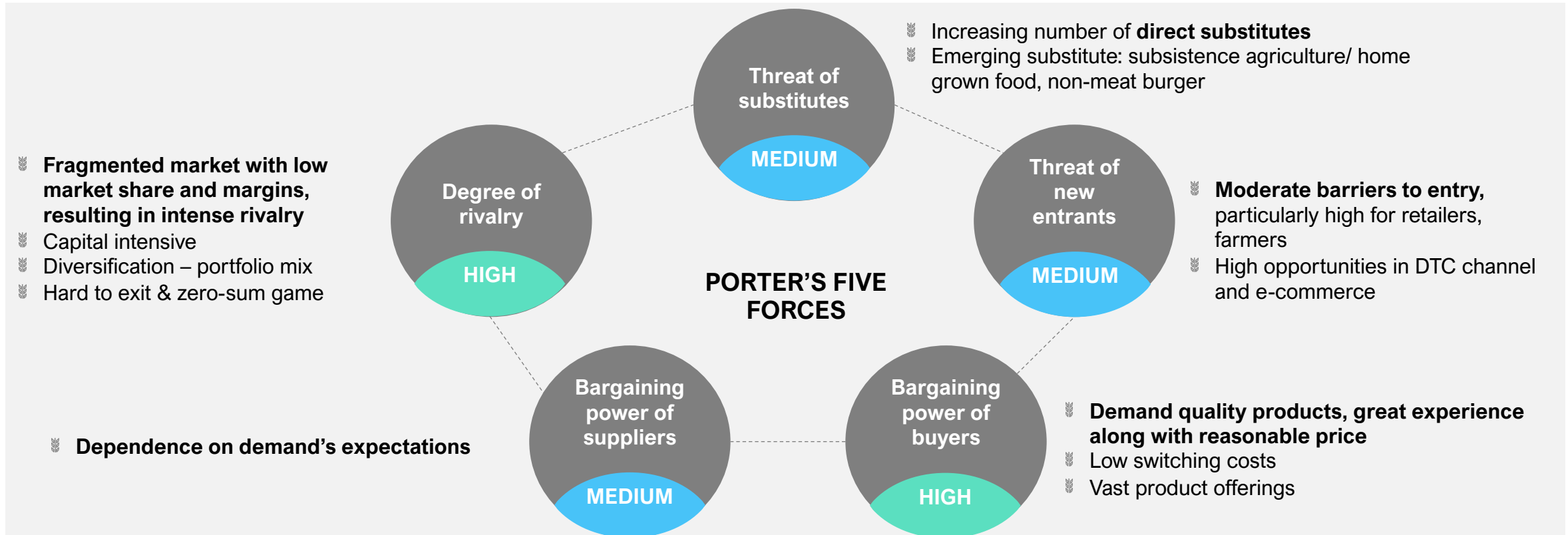
CONCLUSION

Biggest regional market, Asia-Pacific, accounted for 54,8% of the global market and predicted to increase²

Predicted shift towards developing markets – mostly due to demographic, rising disposable income and preferences³

Food industry dynamics demonstrate market attractiveness

Porter's five forces represent in-depth view in supply as well as consumer amenity

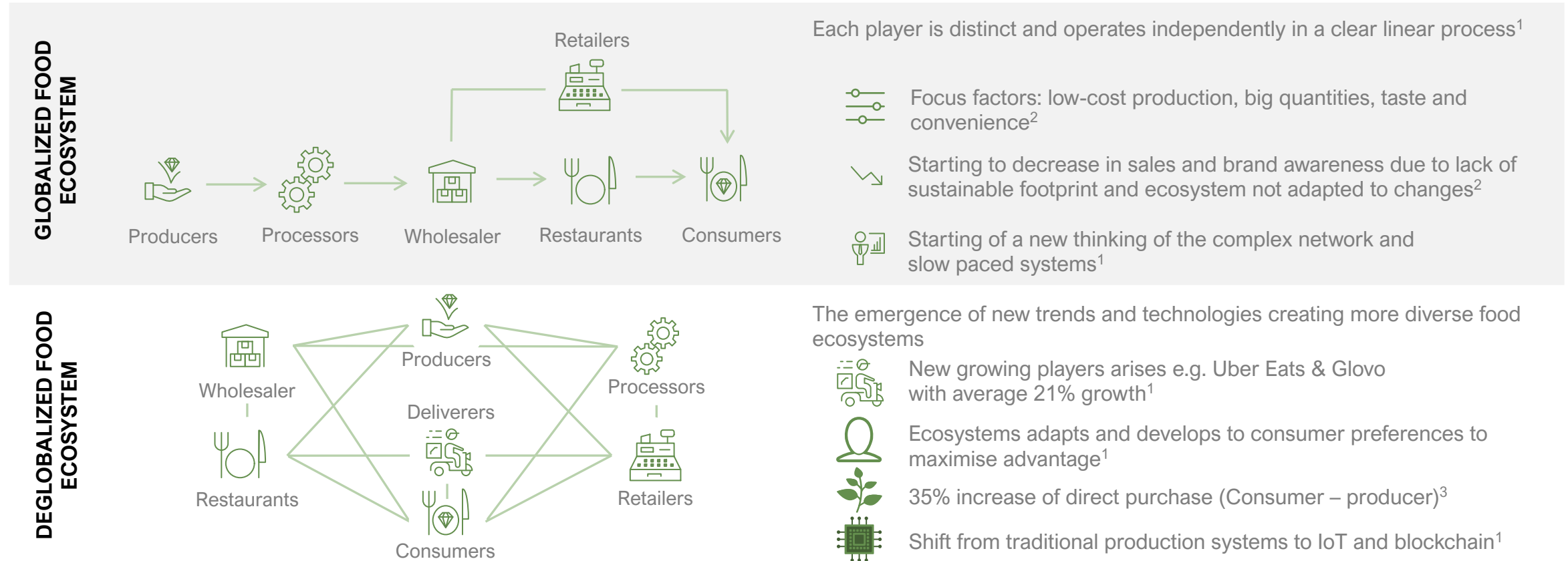


CONCLUSION

Analysis shows moderate barriers to entry, hard to exit the market, capital intensive and generally low differentiation. Therefore, food market provide opportunities and potential emerging advantages through diversification, innovation and trends e.g. D-T-C, home-grown food and local production

Food industry created new opportunities in supply chain towards consumer trends

Trends and shifts seen as enabler to creating new potentials



CONCLUSION

Increasing interconnectedness and interdependence food ecosystem is creating more value and choices¹

Growing importance to become agile: monitor and adapt to changes to remain resilient, sustainable and relevant⁴

2.2 FOOD INDUSTRY

Two-sided market perspective

Food supply chain has undergone significant changes due to industry drivers

Four main actors build food supply-chain



MOST USED STRATEGIES

Strategic portfolio diversification

- Diversify portfolio offering
- Creating a fundament of growth offering and experimentation to enter new market and gain market share¹

Example: Nestle - Blue Bottle Coffee



Backward integration

- Acquires a key supplier of materials, products and manufacturer
- Build competitive advantage e.g. economies of scale & capabilities¹

Example: Tyson - Raised & Rooted



Direct-to-consumer & e-commerce

- Sell products directly to the end-consumer, retailers & Wholesaler
- Provides a simple and cost-effective way to create business and scale up¹

Example: Heinz - Heinz to Home



Demand side possesses driving power shifts, that needs to be adapted by suppliers

Every individual is part of demand side

Consumer



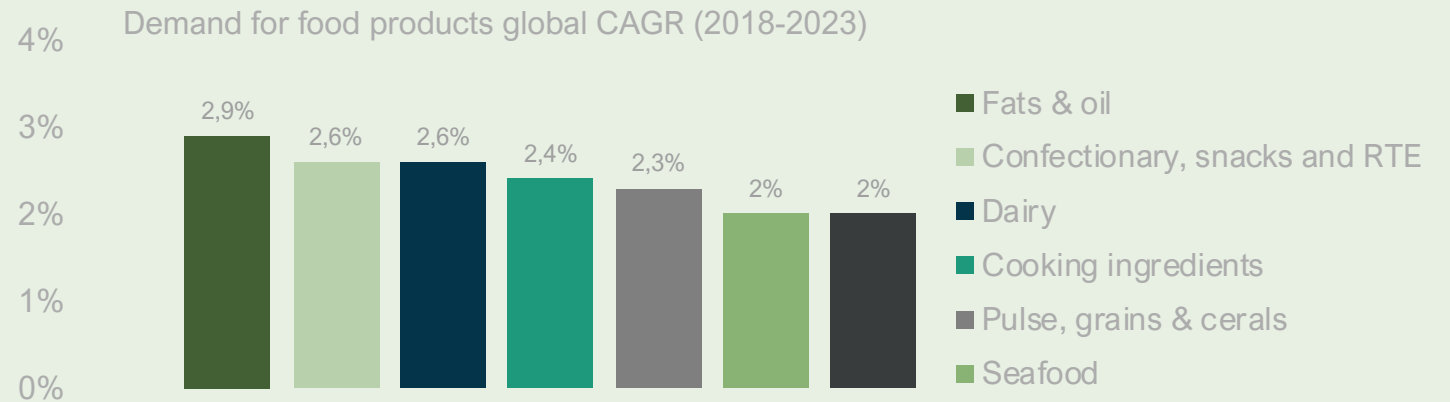
- Consume, shop and purchase various types of products, food & snacks from the supply side¹
- Possess the power to change** that needs to be adapted by offering players²
- Example: Covid-19, transparency, safety and digital offering⁵

amazon
fresh

As a consequence of Covid-19 consumer habits changed – Amazon Fresh introduced online grocery, home-delivery, digital click & collect to adapt to the new changes³

What is demanded?

- Driven by **rise in population** food is set to see further growth and demand⁴
- A CAGR of 1.7% in urbanised population between 2018-2023 and 1% in total population growth increasing global demand for food⁴



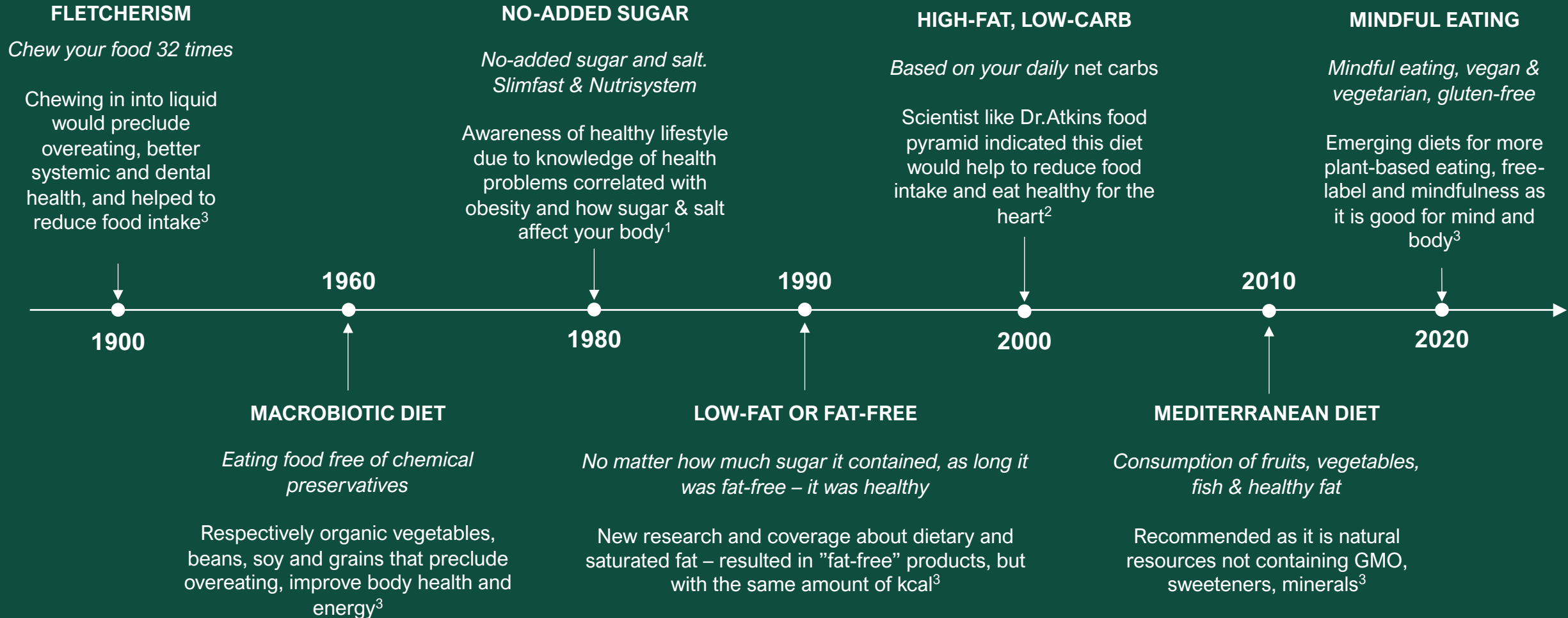
2.3 FOOD INDUSTRY

Development

References: (Henry 2013)



During years, food industry went through various different phases



- Triggered by marketing media and food scientists, food trends are constantly changing³
- The forecasted diets from 2021 will remain mindful, but with a sustainable & healthy shift to both reduce overconsuming of food and for healthy body³

Food industry is a major contributor of the world major challenges and problems

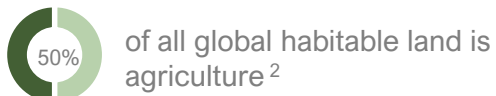
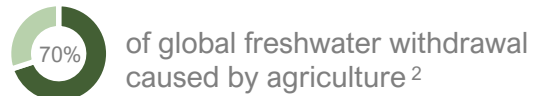
Three main types of challenges can be detected

Food industry is a major contributor to the world in resources and energy intensity. The industry is also one of the major polluter intensifying climate change through deforestation, waste, gas emissions. Finally, food consumption habits have huge impact on people's health²

Climate change / global warming



Food industry indicated as a major contributor to global warming²



Waste in the food supply chain



One-quarter of world agricultural area is used to produce food that is lost or wasted food²

If this land was a country it would be the **second largest in the world**²

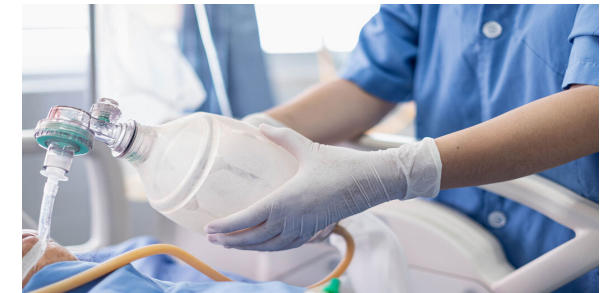
Accounts for **26%** of the world's **greenhouse gas emissions**²

Global emission in bn tn Co2

14

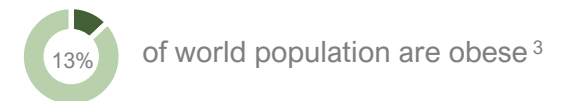
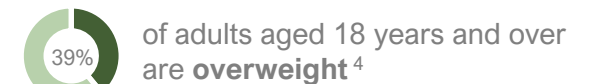
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Health problems



WHO (2020) states **health issues** as one of the **major future challenges** for humans³

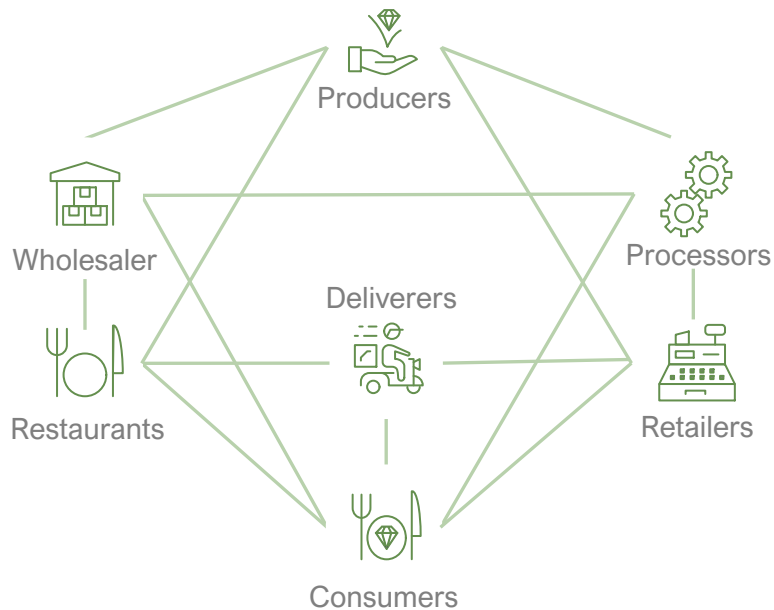
Rise in cardiometabolic diseases is linked to the **availability of unhealthy products**⁴



New developments is vital to stay resilient and agile in a changing environment

Development of food offerings is enforced by developed dynamic food ecosystem

DYNAMIC FOOD ECOSYSTEM



Expanded offering/ presence



Delivery & In-app ordering



Supply side expanding offerings to **address demand and market shifts**
Consumers have increased **use of delivery by 45% and in-app ordering by 51%**¹



Supply businesses needs to adapt to changing market trends – **with delivery predicted to have 3-4% market share by 2023**²



E-commerce / online presence



Businesses need to offer **simple and convenient offerings online** to cope with shifting preferences¹

Technology in supply chain



AI & Machine Learning



In a more smarter and continuously changing environment, **technology offers tools and innovation in demand forecasting, pricing and promotion**⁶



Traceability & Agri-tech



Growing importance of **transparency and consciousness through traceability** of ingredients, products and origin³



Innovation in agriculture have **improved efficiency and waste management**⁴

IMPLICATION OF COVID-19

Covid-19 has accelerated technology and digital shift due to safety, convenient and digital evolvement⁵

Due to covid-19 consumers have shifted towards digital consumption and 35-45% stating this as the preferred future alternative⁵

Gaining advantages by developing solutions and products of anticipated demand

Development of food anticipated demand tackles two main concerns

Health awareness



Natural food & active lifestyle

Ecological awareness



Local consumption & sustainability

Demand drivers⁵

- Health & wellness
- Safety
- Clean diet
- Traditional values convenience, price & taste

- Traceability of food
- Social impact
- Climate footprint
- Local consumption

Innovation

- 88% of companies have introduced formulated products **supporting healthier diets** and lifestyle¹

- Innovate value chain** with production capabilities and M.L to decrease climate footprint⁴
- Align corporate values to consumers values¹

Examples



Introduced healthier products in nutrients and aiming towards natural food and active lifestyle. In addition, commitment to leverage marketing effort promote healthy cooking, eating and lifestyles³



Corporate commitment to **reduce usage of plastic in packaging by 50%**, and collect more plastic than they sell by **2025**²

By not being aware of consumer trends and values, could lead to negative impacts

Implications of health & ecological awareness towards food industry are enormous

Health awareness

This shift has rising as a trigger of food health nutrition science, influencers impact on behaviour and scandals affecting values and impression¹

More and more influencers

- ☞ Possess the power of influencing to inform, teach and communicate to eat healthier³

Examples: Jamie Oliver & Joe Wicks

Rise of plant-based lifestyle

- ☞ Plant-based lifestyle is growing due to enlightenment of vitamins, minerals and trends towards more plant, fruit based diet¹

Consciousness of nutrition & organic

- ☞ Food and nutrition science can learn which food is healthy and unhealthy for body and mind
- ☞ Organic food with no added GMO, sweeteners¹

Ecological awareness

This shift has emerged through ecological consciousness of e.g. climate change, food waste, and influencers impact on behaviour and scandals affecting values and impression¹

Boycott of animal tested products

- ☞ Scandals and greenwashing reveal how businesses exploit animal, and report false ethical numbers- leading to boycott of brands⁴

Conscious consumer activism

- ☞ Consumers are enlightened of how food value chain contribute to climate change, waste and emission⁵

More and more influencers

- ☞ Possess the power of influencing to inform and enlight cases of ecological matter⁵

Example: Greta Thunberg & Leo DiCaprio

Overview: Chapter 2

What is the current situation of the food industry?



The study of the food industry is proving the **relevance** of applying this industry to the study of this master thesis. As the bargaining power of buyers is high, suppliers need to **adapt to the changes in consumer preferences** to be **resilient**. The previous and current challenges of the industry provided first senses of the current consumer trends. In order to provide to suppliers accurate recommendations on how to become more resilient, a **deeper investigation** of the current consumer trends is required

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Figures:

Figure 1: Key players & Food sales (in bn USD, 2019)

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Figure 2: Geographical average kcal/capita/day (food balance)

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Figure 3: Market value forecast 2019-2024 (in bn USD)

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Figure 4: GLOBALIZED FOOD ECOSYSTEM

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Figure 5: DEGLOBALIZED FOOD ECOSYSTEM

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Figure 6: Demand for food products global CAGR (2018-2023)

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Figure 7: Global emission in bn tn Co2

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